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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,454	04/24/2002	Michiel J. van Nieuwstadt	201-0830 AJL	6571
36865	7590	10/05/2005	EXAMINER	
ALLEMAN HALL MCCOY RUSSELL & TUTTLE, LLP			TRAN, DIEM T	
806 S.W. BROADWAY, SUITE 600			ART UNIT	
PORTLAND, OR 97205			PAPER NUMBER	
			3748	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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# **Office Action Summary**

Application No.

10/063,454

Applicant(s)

VAN NIEUWSTADT ET AL.

Examiner

Diem Tran

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## **Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

- 4) ☒ Claim(s) 5,6 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6 and 10-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## **Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## **Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## **Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This office action is in response to the amendment filed on 7/13/05. In this amendment, claim 5 has been amended, claims 1-4, 7-9 have been canceled and claims 16, 17 have been added. Overall, claims 5, 6, 10-17 are pending in this application.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 5, 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Santiago et al. (US Patent 4,747,264).***

Regarding claims 5, 6, Santiago discloses a method for operating an engine coupled to an exhaust system having a diesel particulate filter (12), where the exhaust system terminates at a tailpipe; the engine having an electronically controlled throttle valve (4) that adjusts oxygen flow entering the engine, the method comprising:

commencing a self sustaining filter regeneration (see col. 2, lines ; detecting temperature indicative of said diesel particulate filter (see col. 2, lines 44-47); controlling air flow via the valve based on said detected temperature so as to prevent temperature of the diesel particulate filter from rising to a point that causes degradation due to excessive exothermic reaction by decreasing opening of the valve, while continuing filter regeneration (see col. 3, lines 19-29, 55-

62); and continuously flowing all the exhaust emitted from the tailpipe through the particulate filter.

*Claims 10-12, 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kume et al. (US Patent 4,835,964).*

Regarding claims 10-12, 15, Kume discloses a system comprising:

a diesel engine having an exhaust system terminates at a tailpipe; an electronically controlled exhaust gas recirculation valve (30) coupled to said engine;

a diesel particulate filter (5) in said exhaust system coupled to said engine (see Figure 1); and a controller for commencing a self-sustaining filter regeneration (see col. 15, lines 61-66, col. 16, lines 5-12);

determining temperature of the diesel particulate filter (see col. 18, lines 46-49); if the temperature is greater than a limit, adjusting said EGR valve to reduce oxygen entering said filter and limit the self sustaining regeneration reaction (see col. 18, lines 44-62); and continuously flowing all the exhaust emitted from the tailpipe through the particulate filter.

Regarding claims 16, 17, Kume discloses a method for operating an engine coupled to an exhaust system having a diesel particulate filter (22), where the exhaust system terminates at a tailpipe; the engine having a electronically controlled throttle valve and an electronically controlled exhaust gas recirculation valve that adjusts oxygen flow entering the engine, the method comprising:

commencing a self-sustaining filter regeneration (see col. 15, lines 61-66, col. 16, lines 5-12); detecting temperature indicative of said diesel particulate filter (see col. 18, lines 46-49);

adjusting both the EGR valve and the throttle valve based on said detected temperature so as to prevent temperature of the diesel particulate filter from rising to a point that causes degradation due to excessive exothermic reaction by decreasing excess oxygen, while still providing flow to carry away exhaust heat and continue filter regeneration (see col. 18, 44-62, co. 19, lines 13-31); and continuously flowing all the exhaust emitted from the tailpipe through the particulate filter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claims 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kume et al. (US Patent 4,835,964) as applied to claim 10 above, in view of Kondo et al. (US Patent 4,732,593).***

Regarding claims 13, 14, Kume discloses all the claimed limitations as discussed in claim 10 above; however, fails to disclose that said diesel particulate filter comprises SiC or cordierite. Kondo teaches that it is conventional in the art, to utilize a diesel particulate filter comprising high temperature resistant SiC or cordierite (see col. 2, lines 67-68, col. 3, lines 1-4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Kondo in the Kume system since the use thereof would have produced a durable particulate filter.

*Response to Arguments*

Applicant's arguments filed on 7/22/05 have been fully considered and they are deemed persuasive; however, a new non-final rejection is set forth above.

*Conclusion*

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:00 a.m.- 6:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 800-786-9199 (toll-free).

DT  
September 27, 2005



Diem Tran  
Patent Examiner  
Art unit 3748



THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700